

WHAT IS CLAIMED IS:

1. A peer-to-peer communication apparatus for performing one-to-one communication with another communication apparatus via an IP network,
5 comprising:

first means for performing an encryption process and/or an authentication process with respect to a packet;

second means for acquiring, from a peer's
10 communication apparatus specified by a user of the communication apparatus, presence information including information for judging a communication security environment of said peer's communication apparatus and security policy information including
15 an encryption rule and an authentication rule each to be applied to packets by said peer's communication apparatus; and

third means for displaying said presence information and said security policy information such
20 that said user judges propriety of the security policy information based on the presence information and allowing the user to partly change the security policy information,

said first means processing a packet to be
25 transmitted to said peer's communication apparatus

in accordance with a security policy approved by the user.

2. A peer-to-peer communication apparatus according to claim 1, further comprising:

5 a memory for storing the security policy information acquired from said peer's communication apparatus or the security policy information partly changed by the user via said third means, wherein

10 said first means processes the packet to be transmitted to the peer's communication apparatus in accordance with a security policy stored in the memory.

3. A peer-to-peer communication apparatus according to claim 1, further comprising:

15 a first memory for storing default security policy information to be applied by the communication apparatus to peer-to-peer communication with the other communication apparatus;

20 a second memory for storing the presence information including the information for judging the communication security environment of the communication apparatus; and

25 fourth means for returning in response to a request for the presence information and the security policy information from the other communication apparatus, a response message including the default

security policy information read out from said first memory and the presence information read out from said second memory.

4. A peer-to-peer communication apparatus
5 according to claim 3, further comprising:

a presence information processing unit for partly changing, upon occurrence of a change in the communication environment resulting from movement of the communication apparatus, said presence
10 information stored in said second memory.

5. A peer-to-peer communication apparatus according to claim 1, wherein said first means processes a data packet to be transmitted and a packet received from the IP network in accordance with a
15 security policy of IP security protocols defined by the IETF.

6. A method for peer-to-peer communication between a first communication apparatus and a second communication apparatus each connected to an IP
20 network, the method comprising the steps of:

requesting, from the first communication apparatus to the second communication apparatus, presence information for judging a communication security environment of said second communication
25 apparatus and security policy information including

an encryption rule and an authentication rule to be applied to a packet by said second communication apparatus;

transmitting, from the second communication
5 apparatus to the first communication apparatus, the presence information and security policy information of the second communication apparatus;

outputting to a display screen by the first
communication apparatus, the presence information
10 and security policy information received from said second communication apparatus such that a user can judge propriety of the security policy information based on the presence information; and

performing packet communication with the second
15 communication apparatus by the first communication apparatus in accordance with the security policy approved by the user on said display screen.

7. A method for peer-to-peer communication according to claim 6, further comprising the step of:

20 allowing the user to partly correct the security policy information outputted to said display screen by the first communication apparatus, wherein

the first communication apparatus performs the packet communication with the second communication
25 apparatus in accordance with said corrected security

policy.